

REMARKS

Applicants thank the Examiner for the thorough consideration given the present application. Claims 1-20 are currently being prosecuted. The Examiner is respectfully requested to reconsider the rejections in view of the amendments and remarks as set forth below.

REJECTION UNDER 35 U.S.C. § 112, FIRST PARAGRAPH

Claims 17 and 18 have been amended to address the 35 U.S.C. § 112, first paragraph rejection. Accordingly, it is respectfully requested this rejection be withdrawn.

REJECTIONS UNDER 35 U.S.C. § 103

Claims 1-3 and 9-11 stand rejected under 35 U.S.C § 103(a) as patentable over Ikeyona et al. This rejection is respectfully traversed.

Independent claim 1 includes a combination of elements and is directed to an exhaust gas purifying device in which the exhaust port is formed within a cylinder head, the camshaft is disposed on a side of said exhaust port and supported by said cylinder head, and the valve is disposed another side of said exhaust port. Also, a water jacket is disposed between the camshaft and the exhaust part. Further, the valve is disposed on either a left side or a right side of the engine which is perpendicular to the camshaft and that is different than a front surface of the engine where the exhaust port is open so as to be free from interference with a camshaft actuating device. Independent claim 9 includes similar features in a varying scope.

These features are supported at least by Figure 2 and paragraph [0043] in the present application. For example, Figure 2 illustrates a water jacket 43 being disposed between the

camshaft 30 and the exhaust port 32. The valve 33 being disposed on either a left side or right side of the engine which is perpendicular to camshaft 30 and that is different than a front surface of the engine where the exhaust port 32 is open so as to be free from interference with a camshaft actuating device. Further, as shown, the exhaust port is formed within a cylinder head, the camshaft is disposed on a side of the exhaust port and supported by the cylinder head, and the valve is disposed another side of said exhaust port. In addition, because the water jacket is disposed between the camshaft and the cylinder head, the cylinder head and the camshaft are cooled and the height of the be reduced.

As discussed in paragraph [00042] of the present application, according to the conventional arrangement, because the water supply hose 41, the water supply port 42, and the thermostat housing 18 are positioned in the vicinity of the opening of the exhaust port 32, there's almost no space on the front surface of the cylinder 10 for installing the reed valve 33 of the exhaust gas purifying device in the vicinity of the exhaust port 32. The present invention solves this problem by disposing the valve on either the left or right side of the engine that is different than a front surface of the engine where the exhaust port is open so as to be free from interference with the camshaft actuating device.

In addition, as discussed in paragraph [00052], because the valve case 14 is disposed on the side of the cylinder block 10, the space limitation is eliminated and the design freedom with which to form the valve case 14 is increased. Also, as discussed in paragraph [00044], because the valve case 14 is disposed on the side of the cylinder block 10, the secondary air pipe 16 can extend substantially straight without having to extend around the engine 5. Therefore, the secondary air pipe 16 can easily be laid out and has the desired mechanical strength.

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Therefore, placement of the valve as claimed in the present invention provides a plurality of specific advantages and is not a mere design choice as alleged in the Office Action. Further, as shown in FIG. 1 of Ikenoya et al., the valve L is placed on the front side of the engine in front of the exhaust pipe 9. There is no teaching or suggesting in Ikenoya et al. about placing the valve on the side of the engine as in the present invention.

Further, as discussed in *In re Japikse*, 181 F.2d 1019, 86 USPQ 70 (CCPA 1950), and *In re Kuhle*, 526 F.2d 553, 188 USPQ 7 (CCPA 1975), the mere fact that a worker in the art could rearrange the parts of the reference device to meet the terms of the claims is not by itself sufficient to support a finding of obviousness. The prior art must provide a motivation or reason for the worker in the art, without the benefit of appellant's specification, to make the necessary changes in the reference device.

As discussed above, there is no motivation or reason for the worker in the art, without the benefit of the present application, to make the necessary changes in the reference device. The placement of the valve on the side of the engine is not a mere design choice and provides several advantages as outlined above.

Also, claims 17 and 18 also further define over the applied art. That is, the applied art does not teach or suggest the cylinder block and said cylinder head being inclined toward the main shaft, and the valve being disposed above the main shaft.

Accordingly, it is respectfully submitted independent claims 1 and 9 and each of the claims depending therefrom are allowable.

Further, it is respectfully submitted the rejection of claim 4-8 and 12-16 under 35 U.S.C.

§ 103(a) as unpatentable over Ikeyona et al. in view of Hori et al. has also been overcome as claims 4-8 and 12-16 are dependent claims and Hori et al. also does not teach or suggest the features recited in the corresponding independent claims 1 and 9.

NEW CLAIMS

In addition, new claims 19 and 20 have been added to set forth the invention in a varying scope, and Applicants submit the new claims are fully supported by the originally-filed specification. It is respectfully submitted these claims further define over the applied art.

CONCLUSION

In view of the above remarks, it is believed that the claims clearly distinguish over the patents relied on by the Examiner, either alone or in combination.

Should there be any outstanding matters that need to be resolved in the present application, the Examiner is respectfully requested to contact David A. Bilodeau Reg. No. 42,325 at (703) 205-8072, to conduct an interview in an effort to expedite prosecution in connection with the present application.

If necessary, the Commissioner is hereby authorized in this, concurrent, and future replies to charge payment or credit any overpayment to Deposit Account No. 02-2448 for any additional fees required under 37.C.F.R. §§1.16 or 1.14; particularly, extension of time fees.

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Respectfully submitted,

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